

510(k) Summary

Applicant/Sponsor: Biomet Manufacturing Corp. NOV 2 7 2007

Contact Person: Becky Earl

Regulatory Specialist

Proprietary Name: Biolox® *delta* Ceramic Heads with 100kGy E-Poly™

Acetabular Liners

Common or Usual Name: Ceramic Modular Heads/UHMWPE Liners

Classification Name: Hip joint/ceramic/polymer semiconstrained cemented or

non-cemented prosthesis

Legally Marketed Devices To Which Substantial Equivalence Is Claimed: Biolox® *delta* Ceramic Heads – K042091, K051411 and K061312; 100 kGy E-Poly[™] Acetabular Liners—K070364 and K070399.

Device Description: Biolox® *delta* Ceramic Heads are designed to be the bearing surface of a total hip joint replacement. The highly polished spherical surface articulates with a polyethylene liner acetabular component. The modular head attaches to a metallic femoral stem with a Biomet Type I taper.

The 100 kGy E-Poly[™] acetabular liners for the Biolox® *delta* Ceramic Heads are a larger size of the previously cleared 100 kGy E-Poly[™] liners, K070364 and K070399.

Indications For Use: Biolox® *delta* Ceramic Heads are indicated for use in total hip replacement with cemented or non-cemented femoral and acetabular components in cases of:

- 1. Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis.
- 2. Rheumatoid arthritis.
- Correction of functional deformity.
- 4. Treatment of non-union, femoral neck fracture, and trochanteric fractures of the proximal femur with head involvement, unmanageable by other techniques.
- 5. Revision procedures where other treatment or devices have failed.

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Specific indications for compatible components that can be used with the above modular heads include:

Salvage/Oncology Hip and Total Femur System components also indicated for cases of ligament deficiency, tumor resection, trauma and revision of unsuccessful osteotomy or arthrosis.

Interlocking hip stems are indicated for non-cemented application in cases of revision, trauma, fracture, oncology or other situations where severe proximal bone loss may compromise the fixation and stability of a standard-type hip replacement prosthesis.

The 100 kGy E-Poly[™] Acetabular Liners are intended for cemented and uncemented applications with the following indications for use:

- 1. Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis.
- 2. Rheumatoid arthritis.
- 3. Correction of functional deformity.
- Treatment of non-union, femoral neck fracture, and trochanteric fractures of the proximal femur with head involvement, unmanageable by other techniques.
- 5. Revision of previously failed total hip arthroplasty.

Cemented and Uncemented Applications.

Summary of Technologies: The Biolox® *delta* Ceramic Heads are technologically similar to the predicate devices.

Non-Clinical Testing: All parameters of the "Guidance Document for the Preparation of PreMarket Notifications for Ceramic Ball Hip Systems" were met for the devices contained in this 510(k).





Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

NOV 2 7 2007

Biomet Manufacturing Corp. % Ms. Becky Earl Regulatory Specialist P.O. Box 587 Warsaw, Indiana 46581-0587

Re: K073102

Trade/Device Name: Biolox[®] delta Ceramic Heads with 100 kGy E-Poly[™] Acetabular Liners

Regulation Number: 21 CFR 888.3353

Regulation Name: Hip joint metal/ceramic/polymer semi-constrained cemented or

nonporous uncemented prosthesis

Regulatory Class: II

Product Code: LZO, JDI, LWJ, LPH, MAY

Dated: November 1, 2007 Received: November 2, 2007

Dear Ms. Earl:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050. This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Mark N. Melkerson

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Director

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): K073102

Device Name: 100kGy E-Poly™ Acetabular Components

Indications For Use:

- 1. Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis.
- Rheumatoid arthritis.
- 3. Correction of functional deformity.
- 4. Treatment of non-union, femoral neck fracture, and trochanteric fractures of the proximal femur with head involvement, unmanageable by other techniques.
- 5. Revision of previously failed total hip arthroplasty.

Cemented and Uncemented Applications

Prescription Use X (Part 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use No_ (21 CFR 807 Subpart C)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)
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510(k) Number_

Indications for Use

510(k) Number (if known): K073102

Device Name: 38mm Biolox® delta Ceramic Heads

Indications For Use: Biolox® delta Ceramic Heads are indicated for use in total hip replacement with cemented or non-cemented femoral and acetabular components in cases of:

- 1. Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis.
- 2. Rheumatoid arthritis.
- 3. Correction of functional deformity.
- 4. Treatment of non-union, femoral neck fracture, and trochanteric fractures of the proximal femur with head involvement, unmanageable by other techniques.
- 5. Revision procedures where other treatment or devices have failed.

Specific indications for compatible components that can be used with the above modular heads include:

Salvage/Oncology Hip and Total Femur System components are also indicated for cases of ligament deficiency, tumor resection, trauma and revision of unsuccessful osteotomy or arthrosis. (K974558, K002757, K021380, K033871)

Interlocking hip stems are indicated for non-cemented application in cases of revision, trauma, fracture, oncology or other situations where severe proximal bone loss may compromise the fixation and stability of a standard-type hip replacement prosthesis. (K990830, K042774)

Prescription Use X (Part 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use No (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH. Office of Device Evaluation (ODE)

(Division Sign-Off)

Division of General, Restorative,

and Neurological Devices K073102

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